

# Department of Energy

Washington, DC 20585

December 12, 2006

#### MEMORANDUM FOR DISTRIBUTION

FROM:

Joanne D. Lorence Jul. de

Facility Representative Program Manager

Office of the Departmental Representative to the Defense Nuclear Facilities Safety Board (HS-1.1)

SUBJECT:

Facility Representative Program Performance Indicators Quarterly Report,

July – September 2006 (3<sup>rd</sup> Quarter CY)

Attached is the Facility Representative (FR) Program Performance Indicators Quarterly Report covering the period from July to September 2006. Data for these indicators are gathered by Field elements quarterly per DOE-STD-1063-2006, *Facility Representatives*, and reported to Headquarters program offices for evaluation and feedback to improve the FR Program. A summary of this quarter's data concluded:

76% Fully Qualified 91% Staffing Level 42% Time Spent in the Field (DOE goal >40%) 72% Time Spent in Oversight Activities (DOE Goal > 65%)

For this quarter, percentages are based on FR staffing analyses at 211 Full Time Equivalents (FTEs) and 193 FTEs actual staffing. Current FR information and past quarterly performance indicator reports are accessible at the Facility Representative web site.

Should you have any questions or comments on this report, please contact me at 202-586-7631.

Attachment

## Facility Representative Program Performance Indicators Quarterly Report December 12, 2006

## **Distribution:**

Clav Sell, S-2 Manager, Ames Site Office David Garman, S-3 Chip Lagdon, S-3 John Sullivan, S-3 Linton Brooks, NA-1 James McConnell, NA-2 Thomas D'Agostino, NA-10 Glenn Podonsky, HS-1 Mike Kilpatrick, HS-1 Patricia Worthington, HS-10

James Rispoli, EM-1 Inés Triay, EM-3 Dae Chung, EM-60 Raymond Orbach, SC-1 Dennis Spurgeon, NE-1

Manager, Argonne Site Office Manager, Brookhaven Site Office Manager, Carlsbad Field Office Manager, Chicago Office Manager, Fermi Site Office Manager, Idaho Operations Office Manager, Livermore Site Office Manager, Los Alamos Site Office Manager, Nevada Site Office

Manager, New Brunswick Laboratory

Manager, Oak Ridge Office

Manager, Office of River Protection

Manager, Ohio Field Office

Manager, Pacific Northwest Site Office

Manager, Pantex Site Office

Manager, Portsmouth/Paducah Project Office

Manager, Richland Operations Office Manager, Rocky Flats Project Office

Manager, Sandia Site Office

Manager, Savannah River Operations Office Manager, Savannah River Site Office (NNSA)

Manager, Y-12 Site Office

## cc:

**Program Sponsors:** 

Paul Neeson, ASO Lloyd Piper, CBFO Carson Nealy, CH Robert Stallman, ID Steve Lasell, LSO Ed Christie, LASO Steve Lawrence, NSO Larry Kelly, OR Mike Weis, RL Mark Brown, ORP Roger Christensen, PNSO David Kozlowski, PPPO Elisha Demerson, PXSO Carl Everatt, SR Kevin Hall, SRSO Gary Schmidtke, SSO Bryan Bower, WVDP

Dan Hoag, YSO

#### **Steering Committee Members:**

Eric Turnquest, ASO Creig Zook, ASO Maria Dikeakos, BHSO Peter Kelley, BHSO

Fred Holbrook, CBFO George Basabilvazo, CBFO

Karl Moro, CH Bob Everson, EM-CBC John Scott, FSO Dary Newbry, ID Ed Christie, LASO Henry Rio, LSO Joe Drago, NBL Bob Bangerter, NSO David Cook, WVDP Jennifer Dundas, WVDP Michael Jordan, OH Gary Clifton, OR Patty Dockery, OR Tyrone Harris, OR

Tim Noe, OR Jeff Carlson, PNSO

Barry Parks, SC

Steering Committee Members,

continued:

Leif Dietrich, PSO Carlos Alvarado, PXSO Earl Burkholder, PXSO Mark Brown, RL-ORP Rob Hastings, RL Clark Gunion, RL John Barnes, SRS Phil Giles, SRS Larry Hinson, SRS Veronica Martinez, SSO Jim Todd, SSO

Steve Wellbaum, YSO Craig Scott, EM Bob Goldsmith, EM Wendell Mansel, EM John Evans, NA Carl Sykes, NA

Matthew Hutmaker, NE Casimiro Izquierdo, FE

#### **ENVIRONMENTAL MANAGEMENT SITES**

Facility Representative Program Performance Indicators (3QCY2006)

	Staffing		<u>Actual</u>	_		% Core	% Fully	% Field	% Oversight
Field or Ops Office	<b>Analysis</b>	<u>FTEs</u>	Staffing	% Staffing	<u>Attrition</u>	Qualified	Qualified	Time *	Time **
CBFO	1	2	2	200	0	100	50	60	65
ID (ICP)	12	12	10	83	0	90	90	45	81
OH/WVDP	3	3	3	100	0	100	67	54	74
OR (EM)	19	19	19	100	0	100	74	45	62
ORP	14	14	11	79	0	100	100	47	73
PPPO	4	4	4	100	0	100	100	34	68
RL	19	19	19	100	0	89	89	43	70
SR	30	30	30	100	0	90	87	48	83
EM Totals	102	103	98	96	0	94	86	46	74
DOE GOALS	-	-	-	100	-	-	>80	>40	>65

<sup>\*%</sup> Field Time is defined as the number of hours spent in the plant/field divided by the number of available work hours in the quarter. The number of available work hours is the actual number of hours a Facility Representative works in a calendar quarter, including overtime hours. It does not include leave time (sick, annual, or other) or holidays, nor does it include special assignments greater than 1 week assigned by the Field Element Manager.

\*\* % Oversight Time includes % Field Time

### **EM Facility Representative (FR) Highlights:**

- At Idaho, the ICP FRs shadowed contractor Management Self-Assessment (MSA) team reviews for startup of the CPP-603 Basin Dewatering/Grouting Project, Explosive and Non-Explosive Demolition of the Loss of Fluid Test (LOFT) Containment Dome. FRs concluded that the conduct of the contractor MSA for new activities was generally well conducted with the exception of the CPP-603 Basin Dewatering/Grouting which was performed more as a "punch list" review rather than a verification that the Project was ready to proceed.
- At Oak Ridge, FRs supported transition preparations for 3019 operations from Office of Science to Environmental Management.
- At ORP, a FR identified an improper bolt torque practice while tightening bolts on a safety significant component. While observing tightening of the Hose-in-Hose Transfer Line (HIHTL) primary hose end connection, the FR observed workers using an open end crowfoot attached to the end of and in-line with the torque wrench when the final torque was applied. A crowfoot in this orientation (in-line as opposed to at a right angle) can cause the applied torque to exceed the indicated torque. An engineering evaluation was completed and determined the torque applied slightly exceeded the specified torque range. The condition was accepted and the bolting procedure changed to recognize the proper orientation of a crowfoot extension.
- At Richland, FRs conducted document reviews and oversight for the 100-D-56 Chromium pipe sampling and
  overburden removal project. This project has been of significant interest to the Washington Department of Ecology
  due to the identification and release of hexavalent chrome during an initial attempt to remove the piping.
- At Savannah River, a security operations FR participated as a member of the HQ Explosive Safety Committee to
  prepare the new DOE Manual 440.1-1A "Explosive Safety" and participated in the Rulemaking Committee for the
  new worker safety rule 10 CFR 851 "Worker Safety".
- At Savannah River, Nuclear Material FRs reviewed start-up operations for cutting scrap uranium in gloveboxes and
  the transfer of ventilation from old HB-Line ventilation fans to new fans located inside the building. These new fans
  eliminated a significant accident scenario.
- At West Valley, FRs identified issues regarding heat stress program implementation, hoisting and rigging, fall protection, scaffolding, combustible storage, work planning and execution, and recoverable government equipment.
- At West Valley, FRs provided safety oversight of the Ashtabula Closure Project on a scheduled and as-requested basis to ensure safe and compliant work practices.

## **NUCLEAR ENERGY, SCIENCE, AND TECHNOLOGY**

Facility Representative Program Performance Indicators (3QCY2006)

Field or Ops Office ID (NE) OR (NE)	Staffing Analysis 10 4	FTEs 10 4	Actual Staffing 10 3	% Staffing 100 75	Attrition 0 1	% Core Qualified 100 100	% Fully Qualified 90 100	% Field <u>Time *</u> 45 34	% Oversight Time ** 79 79
NE Totals	14	14	13	93	1	100	92 >80	42 >40	79 >65

<sup>\* %</sup> Field Time is defined as the number of hours spent in the plant/field divided by the number of available work hours in the quarter. The number of available work hours is the actual number of hours a Facility Representative works in a calendar quarter, including overtime hours. It does not include leave time (sick, annual, or other) or holidays, nor does it include special assignments greater than 1 week assigned by the Field Element Manager.

\*\* % Oversight Time includes % Field Time

## **NE Facility Representative (FR) Highlights:**

- A Reactor Technology Complex (RTC) FR noted that a paint crew van and utility trailer that had been driving around the site were not properly hitched. The trailer socket was not engaged with the hitch ball on the van (trailer riding on top of the ball with no mechanical restraint to prevent the trailer from disengaging). The condition was immediately pointed out to the paint crew and BEA management. Upon further investigation, the contractor also determined that the trailer lights were not functional. The contractor determined this event to be ORPS reportable.
- An RTC FR noted a "make shift" scaffold consisting of planks and plywood laid across piping to perform maintenance. The scaffold was not designed, constructed, inspected or used in accordance with OSHA scaffolding requirements as required by contractor procedures. This was immediately brought to the attention of Shift Supervisor who concurred with the FR concerns and took appropriate actions.
- In August, while operating the Neutron Radiography (NRAD) Reactor at the Materials and Fuels Complex (MFC), an unanticipated automatic shutdown (scram) occurred. Without knowing, understanding or correcting the cause for the scram, operations personnel restarted the reactor. In addition, the reactor was restarted without appropriate approvals and calculated estimated critical position, as required. The assigned FR raised a concern resulting in the event being ORPS reportable, and ultimately resulting in the reactor remaining shutdown pending personnel replacement, retraining, procedure upgrades, and a restart assessment.

#### NATIONAL NUCLEAR SECURITY ADMINISTRATION SITES

## Facility Representative Program Performance Indicators (3QCY2006)

	<b>Staffing</b>		<u>Actual</u>			% Core	% Fully	% Field	% Oversight
Site Office	<u>Analysis</u>	<u>FTEs</u>	<u>Staffing</u>	% Staffing	<u>Attrition</u>	<b>Qualified</b>	Qualified	<u>Time *</u>	Time **
LASO	18	15	11	61	1	82	28	28	48
LSO	11	11	11	100	0	55	55	45	70
NSO	10	10	7	70	0	86	43	45	68
PXSO	10	10	10	100	0	70	50	42	76
SRSO	4	4	4	100	0	100	100	48	78
SSO	11	11	11	100	0	45	45	30	52
YSO	12	10	10	83	0	80	80	43	74
NNSA Totals	76	71	64	84	1	70	53	39	65
DOE GOALS	-	-	-	100	-	-	>80	>40	>65

<sup>\* %</sup> Field Time is defined as the number of hours spent in the plant/field divided by the number of available work hours in the quarter. The number of available work hours is the actual number of hours a Facility Representative works in a calendar quarter, including overtime hours. It does not include leave time (sick, annual, or other) or holidays, nor does it include special assignments greater than 1 week assigned by the Field Element Manager.

\*\* % Oversight Time includes % Field Time

## NNSA Facility Representative (FR) Highlights:

- As a result of a Pantex Site Office reorganization, three FRs were added to the staff.
- At Livermmore, during the FRs surveillance of Conduct of Operations, chapter 4 Communications, FRs identified inspection issues to the building paging system for a number of facilities. Records for these paging systems, which are relied upon during emergency events, indicated that the required inspections were either not completed or failed.
- At Livermore, FRs performed a comprehensive review of the LLNL Radioactive Hazardous Waste Management Facilities Conduct of Operations Implementation Matrix.
- At Los Alamos, a FR provided mentoring and tours for one FR in training and one technical intern, including HE
  pressing and machining, hydro test shots & setup, HE device assembly, HE assembly operations, accelerator
  walkdowns, HE safety, mission objectives, and explosives physics concepts.
- At Los Alamos, a FR worked with TA-48 facility and programmatic personnel to formalize the combustible program
  in the Hot Cell area. An authorization basis change request was approved contingent upon demonstration of this
  safety management program's adequacy.
- At Nevada, FRs provided oversight of field activities for the UNICORN Subcritical Experiment. The experiment
  was successfully conducted in August. In addition, the FRs supported an intensive testing program at the NonProliferation Test and Evaluation Complex.
- At Pantex, FRs supported four NNSA Readiness Assessments.
- At Sandia, a FR participated as a Board Member for Type B Accident Investigation Board to investigate the July 31, 2006, Fall from Ladder Accident at the Lawrence Livermore National Laboratory in Livermore, California.
- At Savannah River, FRs supported startup activities for the Tritium Extraction Facility (TEF) with oversight of the
  contractor's Management Self-Assessment and Operational Readiness Review. They also performed an assessment
  of TEF operator proficiency.
- At Y-12, a FR noted a series of degraded roof panels in Y-12 buildings that could lead to a personnel fall hazard. This was reported to the contractor as a personnel safety concern and two roofs were subsequently posted to prohibit access. This issue has been elevated and the Y-12 Site is working on means of assurance that roof "fall through/step-through" hazards are detected and effectively communicated.

#### **OFFICE OF SCIENCE SITES**

## Facility Representative Program Performance Indicators (3QCY2006)

	Staffing		<u>Actual</u>			% Core	% Fully	% Field	% Oversight
Area/Site Office	<b>Analysis</b>	<u>FTEs</u>	Staffing	% Staffing	<u>Attrition</u>	Qualified	Qualified	Time *	Time **
AMES	1	1	1	100	0	100	100	20	85
ASO	5	5	5	100	0	100	100	26	81
BHSO	6	5	5	83	0	80	60	38	86
FSO	2	2	2	100	0	100	100	29	93
OR (SC)	2	2	2	100	0	100	100	45	90
PNSO	2	2	2	100	0	100	100	44	77
PSO	0.5	0.5	0.5	100	0	100	100	42	68
SC Totals	18.5	17.5	17.5	95	0	94	89	34	84
DOE GOALS	-	-	-	100	-	-	>80	>40	>65

<sup>\* %</sup> Field Time is defined as the number of hours spent in the plant/field divided by the number of available work hours in the quarter. The number of available work hours is the actual number of hours a Facility Representative works in a calendar quarter, including overtime hours. It does not include leave time (sick, annual, or other) or holidays, nor does it include special assignments greater than 1 week assigned by the Field Element Manager.

\*\* % Oversight Time includes % Field Time

#### SC Facility Representative (FR) Highlights:

- An ASO FR identified a PISA which later concluded to be a USQ. The situation was an unanalyzed event in the hazard analysis of a Category 3 nuclear facility. The zinc bromide-filled shielding windows of a hot cell facility were not analyzed for failure which could result in high radiation levels outside the hot cell.
- At BHSO, FRs supported PAAA, 10 CFR 851, and Radiological Assistance Program (RAP) activities. FRs also are creating a tracking/trending database for BHSO and creating and updating procedures.
- At Brookhaven, two FRs completed verification of contractor corrective actions for closing several hundred OSHA noncompliances. The corrective actions were associated with the OSHA Audit performed in 2003.
- At Fermi, FSO FRs were involved in numerous safety activities and initiatives this quarter. The following is a list of those activities:
   Implementation activities with DOE O 226.1;
   Participation in the DOE Accelerator Standards Program and in the DOE Accelerator Safety Workshop;
   Participation in the Fermi Site Office QA, Conduct of Operations, and Injury/Illness site-wide reviews;
   Coordination of the 10 CFR 851 Rule Implementation;
   Conducting field verification of NFPA 70E implementation amongst subcontractors.
- At Oak Ridge, FR qualifications completed for 3525 and ORNL Accelerators group. Facility specific qualification media developed for 3025E and each individual accelerator facility (SNS, HRIBF, ORELA).
- At Pacific Northwest, a FR followed the investigation and causal analysis for a pressure release event where
  equipment damage occurred to a small laser system after an associated vacuum chamber over-pressurized due to a
  cryogen leak.
- At Pacific Northwest, a FR investigated the circumstances of a hazardous energy control event where a demolition subcontractor cut into a small pressurized water line resulting in water spray onto energized electrical equipment.
- At Pacific Northwest, a FR monitored the contractor transfer of a 5600-curie cobalt-60 source from the transport cask and insert it into the radiation generating device in the High Exposure Facility in Building 318.
- SC-PSO will no longer be maintaining an official Facility Representative position at SC-PSO after September 30, 2006. Consequently, this will be the last Quarterly FR Performance Indicator Report filed by SC-PSO.